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CATALOGUE

OF

PREPARATIONS

OF

ARTIFICIAL ANATOMY,

BY

Dr. AUZOUX,

OF PARIS,

PROFESSOR OF ANATOMY AND PHYSIOLOGY; CHEVALIER OF THE
LEGION OF HONOUR, &c., &c., &c.

HENRY RAWLS & Co.,
57 State-street, Albany, N. Y.
AGENTS FOR THE UNITED STATES.

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1841.

PREFACE.

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The study of Anatomy which heretofore could only be successfully pursued by direct contact with the recent subject, and which consequently became an object of disgust to most persons, particularly the non-professional student, can, since the introduction of these admirable preparations of Dr. Auzoux, be made a most attractive and delightful pursuit. Divested as this subject can now be of all offensive associations, the anxious and ardent inquirer into the nature of physical man, may now be gratified without subjecting his sensibilities to the repulsive scenes of the dissecting room.

These Preparations, it is by no means pretended, are calculated entirely to supersede the use of the dead body; but from the stamp of usefulness which they have received from the highest authority in France, and the approbation bestowed upon them by the most distinguished anatomists in this country, we feel justified in saying that they may be made highly instrumental in the acquisition of anatomical science to the student, whose facilities for dissection are limited, or whose repugnance to the dissecting room is difficult to be overcome; to the medical practitioner who feels desirous of freshening his knowledge of this important branch of medical education, and to all those out of the profession who wish to become acquainted with the mechanism of the human frame.

With the view of affording to the American public an opportunity of enjoying the advantages to be derived from an examination and study of these ingenious specimens of artificial anatomy, the subscribers have entered into arrangements with Dr. Auzoux, by which they will be enabled to furnish at the shortest possible notice, all, or any of the preparations manufactured by him. It is with pleasure they now announce to MEDICAL INSTITUTIONS, COLLEGES, ACADEMIES, AND SOCIETIES FOR THE PROMOTION OF SCIENCE, that they are

prepared to receive orders for the same at the manufacturer's prices, to which will be added the expenses of importation and 10 per cent commission on the same.

All orders executed within 60 to 90 days.

HENRY RAWLS & Co.,

57 State-street, Albany.

Albany, June 15, 1841.

CATALOGUE.

No. 1. LARGE MODEL OF A MAN, 6 feet high, with case and stand,..... 3,200 fr.

No. 2. SMALL MODEL OF A MAN, 4 feet high, with case and stand,..... 1,050 fr.

Each of these models is composed of 129 pieces, capable of being taken away separately, and of 1115 numbers of detail, without including an infinity of details, of angiology, and neurology, which have not received any particular names. Too minute to be pointed out by authors, these details are reproduced in these models.

A number corresponding to a synoptical table, serves to point the name of the part, and the manner in which it is adjusted. A label placed on each part indicates its name and uses. In a few minutes a table may be covered with these 129 pieces representing 1115 objects of detail, and in less than ten minutes they may be again restored to their places.

No. 3. COMPLETE MODEL OF A WOMAN,1,000 fr.

With the view of facilitating the study of accouchments, Dr. Azoux has made the above model of a woman in which he has reproduced by means of fourteen uterus, (which can be removed and changed) all the periods of gestation. In these uterus can be seen the product of conception. The membranes of the ovum, the modifications they undergo, as well as those which the apparatus of generation undergoes from conception to the moment of parturition. These details are highly interesting, difficult to be understood, and for the representation of which the science possessed only descriptions, plates, or natural products, always difficult to be procured in the human species.

In this model of a woman, Dr. Azoux has reproduced in the thoracic and abdominal cavities, all the organs which are found in them in a living state—each of these organs can be taken out by itself.

To facilitate the explanation of the foetal circulation, there is

shown in the heart of this model, the FORAMEN OVALE open, the EUSTACHIAN VALVE and the DUCTUS ARTERIOSUS.

The pelvis can be detached from the trunk, and with it all the muscles, nerves, and vessels immediately connected with it. A section divides this pelvis into two halves, so as to render more easy the study of the details represented in it.

In connexion with this subject, the following preparations can be furnished separately.

	Francs.
14 UTERI, showing the product of conception at all the periods of gestation, with examples of ovarian and tubal pregnancy,.....	500
FEMALE PELVIS, with the surrounding parts, the internal and external genital organs,.....	300
7 UTERI, with the fœtus and its membrans, at different periods of gestation,.....	300
FŒTAL HEART, of very large dimensions,.....	50
BRAIN AND SPINAL MARROW. For the study of this subject a brain is constructed, in which, by means of numerous sections and the super-position of different parts, are shown all the details of its structure as well as the origin of the nerves in the whole extent of the cerebro spinal axis,.....	150
LYMPHATIC VESSELS. Large model, 6 feet high,..	6,000
“ “ Small “ 4 feet high,..	3,000

This preparation consists of a model of a man, representing one side of the body with the skin removed, and the other side a skeleton. In this as in model No. 1, the vertebral column is divided and the man may be separated into two halves. On the one side are seen all the superficial veins. On the skeleton side are found all the divisions of the arteries and veins, which can be followed from the heart to their last divisions. All these vessels, freed from the soft parts, present the vascular network, and all the anastomoses, the distance which separates the vessels, and the depth to which the instrument must penetrate to avoid or reach them; and the resources which nature has provided after the obliteration of the principal artery. The superficial vessels, reproduced with the sinuosities, indicate the contour of the member in

its complete state. It is on the vascular network that are placed the superficial and deep seated lymphatics, and which the eye can follow from their origin to their termination, through the ganglions. In the cavities is seen the admirable vascular network distributed to the intestines, and the parenchymatous viscera. Through the inextricable network of the liver and the kidneys, are seen the excretory ducts of these organs, which can be followed from their origin to their termination, in the duodenum or bladder. The totality of these vessels, the degree of tenuity of their ultimate divisions, astonish those who see them for the first time. Suppose a subject whose arteries, veins, and lymphatics have been injected, to be deprived by some chemical agent of all its parts except the bones and these vessels, and a just idea can be formed of this preparation, astonishing by the multiplicity of its details, as well as by its strength and durability.

EYE, of very large dimensions. This preparation intended for the study of the eye and vision, is executed on a very large scale. Consisting of the globe of the eye, its membranes, muscles, arteries, and nerves, the whole fixed to the upper wall of the orbit, and each principal part susceptible of being separately detached. Price, 100 fr.

EAR—internal, middle, and external. For the study of the ear and of audition, Dr. Auzoux has made a preparation of dimensions corresponding to those of the eye. A temporal bone to which the external ear is applied. By opening the sections, are found the labyrinth—the nerves which are distributed to it—the middle ear—the eustachian tube—the bone of the ear—the membrane of the tympanum. Each of these parts may be removed and replaced so as to render the explanation of the mechanism of audition easy, 150 fr.

LEG AND FOOT, of the large model, 150 fr.

LEG AND FOOT, of the small model, 50 fr.

at complete state. It is on the vascular network that are placed the superficial and deep seated lymphatics, and which the eye can follow from their origin to their termination, through the ganglions. In the cavity is seen the subcutaneous vascular network distributed to the intestines, and the paracymbiontic viscera. Through the inextinguishable network of the liver and the kidneys, are seen the excretory ducts of these organs, which can be followed from their origin to their termination, in the duodenum or bladder. The totality of these vessels, the degree of tenacity of their ultimate distribution.

The following REPORTS respecting the utility of Dr. Auzoux's Preparations of Artificial Anatomy, are presented from some of the most distinguished men in France, to the various learned societies of that country. Enthusiastic as the French are known to be on all subjects relating to science, it must be acknowledged by all who have had an opportunity of examining these specimens, in this country, that the language of these reports is by no means overstrained or its encomiums undeserved.

To these *foreign* opinions, we have the pleasure to annex a letter from Dr. James H. Armsby, Professor of Anatomy in the Albany Medical College, for whom one of the large Models was imported by us last fall. In a series of popular lectures delivered by him during the past winter, in the Anatomical Theatre of the College, this Model was frequently dissected, and all who attended his course were struck with the facility which this Preparation afforded for the illustration of the most difficult and complicated details of Anatomy.

LEG AND FOOT, of the small model, 60 ft.
LEG AND FOOT, of the large model, 120 ft.
LEG AND FOOT, of the large model, 120 ft.
LEG AND FOOT, of the large model, 120 ft.

REPORT

Made to the Royal Academy of Medicine, by Messrs. Adelon, Anthony Dubois, Ribes, H. Cloquet, Cruveilhier, Breschet, and Baffos.

SESSION, 10th May, 1831.

GENTLEMEN,

In the years 1822, 1823, and 1825,¹ M. Auzoux submitted to your examination specimens of Artificial Anatomy, intended to represent the different parts which enter into the composition of the human body.

You appointed, in order to render you an account of the labors of our colleague, Messrs. Dumeril, Bèclard, H. Cloquet, Desgenettes, Breschet, Richerand, and Allard. This committee, fully capable by their profound attainments, to discharge the trust reposed in them, stated to you their opinion as to the great importance of M. Auzoux's discovery, and invoked for its distinguished author your thanks; they observed, likewise, that M. Auzoux was entitled to the encouragement which the French Government always accorded to those who do honor to their country. "*France*," in the language of M. Allard, "*has this day the advantage of surpassing all other nations in the art of Anatomical Imitations.*"

Your favorable opinion, gentlemen, has been confirmed by the extraordinary anxiety evinced by the public institutions of almost all civilized countries to obtain this wonderful Preparation. Your eulogiums and the avidity with which these specimens have been sought after by Foreigners, have given a new impulse to the zeal of our colleague. We transcribe, with great pleasure, what was said in 1823, by the Medical Society of Emulation: "We cheerfully accord to M. Auzoux the thanks due to his zeal in the cause of science;—his patience, his ingenious essays, and the brilliant

results accomplished by his perseverance and profound knowledge of Anatomy."

After five years of arduous toil, M. Auzoux submitted to the Academy, at its session of 25th May, 1830, a new specimen of Anatomy, for the examination of which you appointed Messrs. A. Dubois, Ribes, Adelon, Cruveilhier, Breschet, H. Cloquet, and myself.

It was not to any slight modifications, or additions of little importance, that our colleague devoted himself; he so far remodelled his previous efforts that nothing was preserved but the *modus faciendi*. M. Auzoux has designed an Adult, five feet six inches in height, and imposed upon himself the task of delineating the minutest details of our physical structure.

This new model, compared with what he had yet done, or even with the complete specimen submitted to your examination in 1825, and which was deemed worthy of high praise, presents, nevertheless, such great improvements, that it is difficult to conceive it to be the work of the same artist. The forms have been completely changed, the details more than doubled; and by means of ingenious sections, M. Auzoux has succeeded in exhibiting all that relates to myology, angeology, neurology, and splanchnology; even the bones themselves are so naturally represented, that it is not easy to distinguish them from the veritable bones of the Cadaver. The minutest parts of the human system—the most delicate as also the most voluminous—the soft as well as the hard—the superficial and profound—are exhibited with the greatest accuracy in their forms, colors, and connections. We do not consider it necessary to enter into an analysis of all these details; we prefer, rather, to draw your attention to certain parts, which have more especially attracted the notice of your committee.

The representation of the Heart is exceedingly happy; by means of a section made in the inter-auricular and inter-ventricular partition, this organ is divided into two halves: upon each half are two cavities, which may be opened so as to bring into view the valves—all these parts re-unite so exactly, that the traces of division can scarcely be recognized—and in the entire they exhibit a heart of the natural size, whence are seen the vessels, which

either originate from this organ or are returned to it. All these vessels being traced from their origin to their termination, it is easy to study their different branches, their numerous anastomoses, and their relations with the different organs.

The preparation of the Head, in which are found the mouth, pharynx, larynx, and nasal fossæ, with the muscles, arteries, veins, and nerves which accompany these parts, or which are distributed there, has appeared to your committee to offer an accuracy in detail which has never been equalled.

The Brain, Spinal Marrow, and Great Sympathetic Nerve, have been represented, with all their details in so perfect a manner, as to leave nothing to be desired.

Your committee are happy in being able to announce the entire realization of the hopes, which you were induced to cherish, not only by the reports of preceeding committees, those of the Royal Academy of Sciences, and of the Medical Society of Emulation, but by the testimony of many distinguished physicians whose opinions had been requested.

M. Auzoux has rendered a great service to practitioners, who, after having completed their studies on the *Cadaver*, will be enabled to review in a very brief time all that they had previously learned. Surgeons remote from large cities will be especially benefitted by the opportunity afforded them of studying the relations of the various parts.

This preparation will be of essential utility in public demonstrations. In schools of Anatomy, for example, where there is a deficiency of subjects, the professor can describe the course and relation of blood vessels, nerves, &c.

There is a natural repugnance to the study of Anatomy in persons who are not called to it by the necessity of their profession. However, for years past it has been desirable that the youth of our country, in completing their education, should have some idea of human organization. The utility of this study has been felt by the Prince whom France has called to the throne: by his particular desire, his son prosecuted a course of Anatomy.

Your committee, gentlemen, have the honor to suggest that thanks be returned to M. Auzoux, with the assurance that the

Royal Academy is well satisfied with his labors, and that he be included in the approaching election. The committee further propose, that the present report be sent to the Minister of the Interior, with the opinion that these preparations should be introduced into the Royal Colleges, Schools of Medicine, and other public establishments.

The Academy, moreover, voted that one of M. Auzoux's preparations be purchased and placed in the Session Chamber.

Perpetual Secretary of the Royal Academy of Medicine.

(Signed) PARISSET.

Paris, 10th May, 1831.

The Royal Academy adopted the report and its conclusions. It remarked, however, that the committee had not insisted sufficiently on the advantages of M. Auzoux's preparations in warm climates; that if it were useful to students, practitioners, and scientific men in those countries in which human dissections are comparatively easy, it was of indispensable necessity in those latitudes in which the dissection of the dead could not be prosecuted without compromising the health of the living.

(Signed) GUENEAU DE MUSSY.

10th May, 1831.

REPORT

By M. A. PASSY, to the Concil General.

SESSION of 1835.

I wish to apprise you of a new and singular enterprise, which has just enriched this department. Doctor Auzoux has established manufactories for the making of Anatomical preparations in his native place, St. Aubin d' Ecrôville. He employs sixty work people, of all ages; and with their ordinary labor, consisting of painting and sculpture, he unites particular instructions, which, toge-

ther with his assiduous care, serve at once to develop the intelligence and morality of those he employs.

If a stranger were accidentally to visit his manufactories, remote as they are from large cities, and ask what object was to be answered by the industrious efforts of those around him, he would be astonished to learn, that, in the midst of the forest, as it were, people were devoting themselves to the most extraordinary and learned occupation. If he were to enter the workshops, he would hear the pure language of Anatomy; he would be amazed to find children explaining the most surprising operations of the mechanism of life.

I would propose that the sum of three thousand francs be appropriated for the purchase of an Anatomical Preparation of M. Auzoux; that it be placed in the Amphitheatre of this city, and be used in the public demonstrations of Anatomy.

REPORT

By M. Baron CHARLES DUPIN, Member of the Institute, to the Central Committee on the Products of French Industry.

The study of Anatomy is an object of disgust to the generality of people, and contact with the dead subject, loathsome to all, prevents those not of the medical profession from prosecuting the interesting subject of human Anatomy.

M. Auzoux, for public lectures and isolated study, has superceded, by a composition at once flexible and solid, which receives and preserves the most delicate impressions, the necessity of encountering the impurities of the dissecting room; he has exhibited, by sub-divisions extremely numerous, the different parts of the human body, which, collectively, present in the most perfect manner natural man.

In its *ensemble*, this preparation presents the Anatomical Subject deprived of the integuments and cellular tissue; and exhibits true to life the muscles, aponeuroses, cartilages, nerves, viscera, and blood vessels, with their form, color, and natural positions.

In the examination in detail, each piece, retained by two clasps is removed, and presents separately the limb, organ, viscus, mus-

cle, nerve, or blood vessel, which it may be desirous of examining. The heart and brain are susceptible of being opened and examined in their minutest structures, and their entire interior is fully revealed.

The Academies of Science and Medicine have passed high encomiums upon this admirable production, so justly appreciated by foreigners. In Great Britain, the invention of M. Auzoux, has sufficed to have revoked, as hereafter useless, the law which prevents the selling of dead bodies, a law which has given rise to the most atrocious crimes. The French Government have caused these inimitable preparations to be placed in the Military Hospitals of Instruction, and in the majority of the Schools of Medicine; and their usefulness has been extended to the colonies. Numbers of these models have been ordered for Russia, Turkey, the East and West Indies, Italy, Mexico, St. Domingo, and they have served to found Schools of Medicine in Cairo, Constantinople, Persia, Syria, &c.

It will be readily shown, by the following fact, with what rapidity the knowledge of Anatomy is extending itself; the workmen employed by M. Auzoux, even the most illiterate, are all in a condition to teach the science. One of his pupils, taken from the country to work at his preparations, and who scarcely knew how to read, has become in three years a learned Anatomist; he now resides at Cairo, and is eminently distinguished—he is not yet twenty years of age.

The preparation of M. Auzoux will enable Professors to impart the highly interesting science of Anatomy to the people at large.

At the last exhibition of the products of French industry, the wonderful models of M. Auzoux were submitted to public examination. They were objects of great attention on the part of the King, the Members of the Council, of all the public journals, and especially of the citizens, whose anxiety to examine the preparations was such, that the Administration was under the necessity of adopting measures to check the impulse which M. Auzoux's happy and natural delineation of the human subject had created.

ACADEMY OF SCIENCES.

SESSION, 10th April, 1835.

Extract from the Report by Messrs. PORTAL and DUMERIL.

It is extremely desirable that the people generally should know something of their wonderful organization. Can it be supposed that an educated man of the present day would be content to remain ignorant of the manner and means of his various movements, and of the organs by which his sensations and principal functions are produced? All this can be learned, without encountering the loathsomeness of the dissecting room, from the admirable preparation introduced to the public by M. Auzoux. No one can now complain that he does not enjoy abundant opportunity to become more intimately acquainted with the intricacies of his own extraordinary mechanism.

ROYAL INSTITUTE OF FRANCE.

Extract from the Report of Messrs. BOYER, SERRES, and GEOFROY SAINT-HILAIRE.

A general knowledge of the parts comprising the human system, will one day form an important branch of education among all classes of society. Sooner or later this will be insisted upon; but in no way can this study be adapted to the people at large, but through the resources of the splendid invention of M. Auzoux.

OPINION OF PROFESSOR LÆNNEC,

Addressed to the Minister of the Interior.

I have examined in detail the Artificial Anatomy of M. Auzoux, and I can attest to its excellence as well as utility. If its originator could place it at a price which would enable the various Anatomical Theatres to provide themselves with it, the following advantages would result:

1. The time ordinarily allotted to the study of Anatomy would be considerably abridged.

2. There would be a great diminution in the number of subjects necessary for dissection, for the student having previously become thoroughly acquainted with the form and relations of the various organs by studying the preparation of M. Auzoux, could soon perfect himself on the Cadaver.

3. The student would have an opportunity of refreshing his recollection with regard to the various points in Anatomical science, which he may have forgotten.

4. The entire freedom of this Preparation from the loathsomeness of the dissecting room, would prove attractive to such pupils as are not over zealous in their labors.

(Signed) AG. LÆNNEC, D. M.

Professor in the Medical Society of Paris, and in the College of France.

CONCLUSIONS.

The following conclusions are derived from the Reports which have been made with regard to my Artificial Anatomy, to the Royal Academy of Medicine, to the Institute, and to the Medical Society of Emulation:

1. That this Preparation has the advantage of abridging the time usually devoted to the study of Anatomy.

2. That it furnishes to students and practitioners an opportunity of renewing their knowledge of this interesting study.

3. That it will render the study of Anatomy practicable to all classes of society.

4. It will furnish the means of prosecuting Anatomical researches in those countries in which the warmth of the climate, or the prejudices of the people, are adverse to human dissection.

5. It affords the opportunity of studying Anatomy during all seasons of the year and under every circumstance.

6. It exhibits, at the same time, and on the same subject, in the standing position, all the parts which enter into the composition of

the human body, together with their natural color, relations, situations, figure, extent, and attachments.

7. It contributes to the perfection of the fine arts, by rendering the study of Anatomy less disgusting and more easy.

8. It is capable of accomplishing the hopes long since expressed by learned men, who have devoted themselves to the education of youth, that the *study of Anatomy should form a part of public instruction*. Such were the wishes of Decartes, Montesquieu, Bossuet, Demarsais, and of all those whose business it has been to preside over public instruction.

M. AUZOUX.

The following is an extract from a Letter, written by Dr. HARLAN, of Philadelphia—dated Paris, May 10, 1839.*

“Among the improvements in Anatomy, I ought to mention the gratification that I experienced in attending the lectures of Dr. Auzoux, who, for the benefit of the fastidious, has succeeded in divesting Anatomy of all its disgust and horror, and rendered it a pursuit even for ladies; a number of the most respectable of whom were constant attendants of his demonstrations, which are made entirely from artificial subjects, in which each portion is separate, marked with names or numbers, and in which there is one advantage it possesses over the real subject—that all the relative positions of muscle, tendon, nerve, blood-vessel, and bone are beautifully displayed.”

* See Medical Examiner, No. 28, Vol. 2.

Albany Medical College, June 21, 1841.

GENTLEMEN,

In reply to your letter of the 20th inst., asking my opinion relative to the Artificial Anatomy of Auzoux, I have the pleasure to state, that I have used his "Complete Model of a Man," during one Lecture Term, in the Albany Medical College, and believe that the Preparation and its distinguished author, merit all the encomiums which have been bestowed upon them, both at home and abroad. Dr. Auzoux has delineated all of the most important parts of the human body, in their different forms, situations, and relations, with a degree of accuracy and fidelity that can be surpassed only by the handy work of Nature herself, and has left *nothing to be achieved* in this department of the science, more worthy of our admiration. His zeal, patience, and perseverance, during a period of more than twenty years devoted to this object; the brilliant results which have crowned his efforts; and the mighty impulse which his discoveries have give to the science, in his own and other countries, entitle him to be ranked among the greatest benefactors of his race. The introduction of these preparations, and the adaptation of Anatomical studies to the popular mind, constitute a new era in the history of science, the influence of which will be felt through after time. By means of these Preparations, Anatomy can now become the study of all, and the time is not far distant, I trust, when our colleges, literary and scientific institutions, academies and associations for mutual improvement, will be provided with these preparations, and Anatomy will become a popular branch of education.

Your efforts, gentlemen, to introduce these Preparations into this country, will, I have no doubt, be crowned with complete success, and the profession generally, will feel a pride in contributing to promote so laudable an enterprise.

Very respectfully,

Your ob't. servant,

J. H. ARMSBY.

TO MESSRS. HENRY RAWLS & Co.



(FROM *κλαω* TO BREAK,)

CATALOGUE OF PRICES.